HECEIVED CENTRAL FAX CENTER

APR 0 1 2010

10/566,620

1-22. (CANCELED)

- 23. (CURRENTLY AMENDED) A method of operating an automatic transmission of a motor vehicle having a clutch located between [[the]] <u>a</u> drive engine motor and the transmission, the method comprising the steps of:
- (a) carrying out a first downshifting operation during a coasting mode while the clutch is disengage and without any engine braking of the vehicle; and one of:
- (b1) terminating the first downshifting operation by engagement of the clutch, located between the vehicle drive motor and the transmission, if a speed of the vehicle is above a predetermined threshold speed <u>determined by a current transmission</u> <u>gear ratio</u>; and
- (b2) terminating the first downshifting operation without engagement of the clutch, located between the vehicle drive motor and the transmission, if the speed of the vehicle is below the predetermined threshold speed.
- 24. (PREVIOUSLY AMENDED) The method according to claim 23, further comprising the step of carrying out a second downshifting operation, while the clutch remains continually disengaged, if a reasonably great probability exists that a driver has a desire for positive drive torque as well as desiring uninterrupted travel.
- 25. (PREVIOUSLY PRESENTED) The method according to claim 24, further comprising the step of determining the desire for positive drive torque by an indicator.
- 26. (CURRENTLY AMENDED) The method according to claim 24, further comprising the step of indicating the desire for the positive drive torque by one or more of:

releasing operative brakes of the vehicle, deflecting an activation lever for a direction of travel, and using a steering angle of a vehicle steering mechanism.

- 27. (CURRENTLY AMENDED) The method according to claim 24, further comprising the steps of indicating the desire for the positive drive torque by using a steering angle of a vehicle steering mechanism and determining a driver's desire for the positive drive torque by way of overstepping of the steering angle as compared to a predetermined steering angle.
- 28. (PREVIOUSLY AMENDED) The method according to claim 24, further comprising the step of using, for a determination of the probability of the driver's wish

10/566,620

for [[a]] the positive torque, two or more of named indicators or other indicators in common.

- 29. (PREVIOUSLY AMENDED) The method according to claim 23, further comprising the step of preventing the downshifting operation if operational brakes of the vehicle are activated.
- 30. (CURRENTLY AMENDED) The method according to claim 23, further comprising the step of engaging the clutch when the speed of the vehicle is above the predetermined threshold speed, to terminate the downshifting operation, only when a power control member of the motor vehicle is activated.
- 31. (CURRENTLY AMENDED) The method according to claim 23, further comprising the step of always terminating engagement of a starting gear of the vautomatic transmission at the end of the downshifting operation with a disengaged clutch when the current gear of the automatic transmission is a starting gear.
- 32. (PREVIOUSLY PRESENTED) The method according to claim 23, further comprising the step of selecting <u>a next</u> gear <u>for a downshift</u> jumps during the downshifting dependent on vehicle deceleration.
 - 33. (CANCELED)
- 34. (CURRENTLY AMENDED) A method of operating an automatic transmission of a motor vehicle, the method comprising the steps of:
- (a) carrying out a first downshifting operation from a higher gear to a lower gear during a coasting mode of the automatic transmission, without any engine braking of the vehicle, by:

disengaging a clutch located between the automatic transmission and a vehicle engine;

shifting from the higher gear to the lower gear in the automatic transmission; and

one of:

(b1) terminating the first downshifting operation by engaging the clutch, located between the automatic transmission and the vehicle engine, if a speed of the vehicle is above a predetermined threshold speed <u>determined by a current transmission gear ratio</u> so that engine compression influences the vehicle:

and

-

10/566,620

- (b2) terminating the first downshifting operation without engagement of the clutch, located between the vehicle drive motor and the transmission, if the speed of the vehicle is below the predetermined threshold speed;
- (c) if the vehicle speed continues to decrease, carrying out a second downshifting operation of the automatic transmission by disengaging the clutch, located between the automatic transmission and the vehicle engine, by

downshifting from the lower gear to a first next lower gear in the automatic transmission (d1) terminating the second downshifting operation by engaging the clutch, located between the automatic transmission and the vehicle engine, if a speed of the vehicle is above [[a]] the predetermined threshold speed so that engine compression influences the vehicle; and

(d2) terminating the second downshifting operation without engagement of the clutch, located between the vehicle drive motor and the transmission, if the speed of the vehicle is below the predetermined threshold speed; determining a driver desire for positive drive torque;

and

terminating the second downshifting operation by

engaging the clutch.

35. (PREVIOUSLY AMENDED) The method according to claim 34, further comprising the step of determining the driver desire for positive drive torque by identifying at least one of:

releasing operative brakes of the vehicle, deflecting an activation lever for a direction of travel; and a predetermined steering angle of a vehicle steering mechanism; and activation of a power control member.

- 36. (CURRENTLY AMENDED) A method of operating an automatic transmission of a motor vehicle, the method comprising the steps of:
- (a) entering a vehicle coasting mode, without any engine braking, by disengaging a clutch located between a vehicle drive motor and [[a]] the transmission; and

performing a first downshift from a higher gear to a next lower gear of the automatic transmission;

47/10 -10-00 AM

10/566,620

and one of:

- (b1) re-engaging the clutch, located between the vehicle drive motor and the transmission, with the next lower gear to terminate the first downshift if a speed of the vehicle is above a predetermined threshold speed <u>determined by a current transmission gear ratio</u>; and
- (b2) maintaining the clutch, located between the vehicle drive motor and the transmission, disengaged with the next lower gear to terminate the first downshift if a speed of the vehicle is below the predetermined threshold speed; and
- (c) in the event that the speed of the vehicle continues to decelerate, then:

disengaging the clutch, if the clutch is engaged;
performing a second downshift from the next lower gear to
a second next lower gear.

- (d1) re-engaging the clutch, located between the vehicle drive motor and the transmission, with the second next lower gear to terminate the second downshift if a speed of the vehicle is above [[a]] the predetermined threshold speed; and
- (d2) maintaining the clutch, located between the vehicle drive motor and the transmission, disengaged with the second next lower gear to terminate the second downshift if a speed of the vehicle is below the predetermined threshold speed.